COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Blue Ridge Regional Office
www.deq.virginia.gov

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May 22, 2012

Mr. Robert McKinley
Vice President, General Construction
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Location: Campbell County
Registration No.: 30859
County-Plant ID: 51-031-00156

Dear Mr. McKinley:

Attached is a permit to modify and operate an electricity generating facility in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This permit supersedes your PSD permit and replaces your minor NSR Permit, both dated January 30, 2008.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

The Department of Environmental Quality (DEQ) deemed the application complete on March 12, 2012. The Department solicited written public comments by placing a newspaper advertisement in Lynchburg's *The News & Advance* on March 16, 2012. The required comment period provided by 9 VAC 5-80-1170 D expired on May 1, 2012. A public hearing was held on April 16, 2012.

This permit approval to construct and operate shall not relieve Dominion Generation of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-180 provides that you may request direct consideration of the decision by the

Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

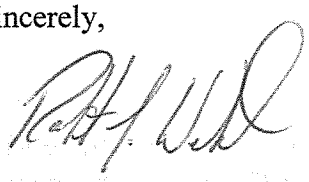
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact Tom Berkeley at (434)582-6205.

Sincerely,



Robert J. Weld
Regional Director

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III

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PREVENTION OF SIGNIFICANT DETERIORATION PERMIT

NEW SOURCE PERFORMANCE STANDARDS PERMIT

STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE

Parts I, III, and IV of this permit shall supersede your Prevention of Significant Deterioration permit dated February 21, 1990 and amended on April 9, 1990, December 16, 1993, May 13, 1996, January 9, 2003, November 5, 2003, and January 30, 2008 in accordance with Condition 2 of this permit.

Parts II, III, and IV of this permit shall replace your minor New Source Review permit dated February 21, 1990 and amended on April 9, 1990, December 16, 1993, May 13, 1996, January 9, 2003, November 5, 2003; and January 30, 2008 in accordance with Condition 2 of this permit.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Dominion Generation
Altavista Power Station (APS)
104 Wood Lane
Altavista, Virginia 24517-1450
Registration No. 30859
County-Plant No. 031-0156

is authorized to modify and operate

an electricity generating facility

located at

104 Wood Lane in Altavista, Virginia

in accordance with the Conditions of this permit.

Approved on May 22, 2012

Robert J. Weld
Regional Director, Blue Ridge Regional Office

Permit consists of 42 pages.
Introduction – Conditions 1and 2
Part I – Prevention of Significant Deterioration Specific Conditions 3 to 55.
Part II – Minor New Source Review Specific Conditions 56 to 109.
Part III – Source Wide Conditions 110 to 125.
Part IV – Document List, 102 items.

INTRODUCTION

This permit approval is based on the permit application dated May 4, 1988 including amendment information referenced in Part IV of this permit. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-20 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

1. **Equipment List** - Equipment at this facility consists of the following:

   The equipment to be modified by this permit:

   - two (2) 394 x 10^6 Btu per hour primary, biomass-fired, spreader stoker boilers with a multiple cyclone collector, a lime-water injection spray dryer, and a fabric filter; and

   - three wet ash handling systems

   The equipment to be constructed by this permit:

   - one biomass handling system (unloading, conveyor feed system, storage pile and metering system).

   The equipment permitted prior to the date of this permit:

   - one (1) 146.4 x 10^6 Btu per hour auxiliary natural gas/No. 2 oil boiler;

- one dry ash disposal and flue gas desulfurization product system;
- one lime handling system (unloading, storage);
- one wood dust system (unloading, storage, pulverizer, conveyor feed system);
- one ammonia handling system (unloading, storage);
- two (2) diesel engines (including one emergency boiler feedwater pump with a maximum rated capacity of 126 brake horsepower, and one firewater pump with a maximum rated capacity of 208 brake horsepower); and
- one (1) 100,000-gallon capacity, above ground storage tank for distillate oil.

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.
(9 VAC 5-80-1985 D and 9 VAC 80-1180 D 3)

2. Upon start up of the biomass handling system as described in the permit application, including amendment information, as referenced in Part IV of this permit:

   a. Parts I, III, and IV of this permit shall supersede your Prevention of Significant Deterioration permit dated February 21, 1990 and amended on April 9, 1990, December 16, 1993, May 13, 1996, January 9, 2003, November 5, 2003; and January 30, 2008, and

   b. Parts II, III, and IV of this permit shall replace your minor New Source Review permit dated February 21, 1990 and amended on April 9, 1990, December 16, 1993, May 13, 1996, January 9, 2003, November 5, 2003; and January 30, 2008.

   (9 VAC 5-80-1985 D, and 9 VAC 5-80-1180)

PART I – Prevention of Significant Deterioration Permit Specific Conditions
Conditions 3 through 55 are established pursuant to 9 VAC 5-80-1605 *et seq*. The conditions are federally enforceable under the federal Clean Air Act. Additional **Source Wide Conditions** are contained in Part III below.

3. Particulate emissions from the primary boilers shall be controlled by an in-line multiple cyclone, a lime-water injection spray dryer, and a fabric filter rated at 99.9 percent control efficiency. The control systems shall be provided with adequate access for inspection. The fabric filter may be bypassed during boiler start-ups to alleviate potential moisture damage to the fabric filter at low start-up temperatures. Each fabric filter shall be equipped with a device to continuously measure pressure drop.
   (9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

4. Particulate emissions from the auxiliary boiler shall be controlled by combustion efficiency.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

5. Particulate emissions from the wood storage silo, the emergency truck loading station, lime storage silo, recycle bin, and discharge storage silo shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

6. Particulate emissions from the biomass hog shall be controlled by total enclosure.
(9 VAC 5-50-90 and 9 VAC 5-80-1985 E)

7. Sulfur dioxide emissions from the primary boilers shall be controlled by a lime-water injection spray dryer. The control system shall be provided with adequate access for inspection.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

8. Nitrogen oxide emissions from the primary boilers shall be controlled by continuous biomass feed systems, staged combustion low excess air, and selective non-catalytic reduction.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

9. The wood pulverizer systems shall include fabric filters for the collection of the pulverized wood fuel. The fabric filters shall be provided with adequate access for inspection.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

10. Lime slaker emissions shall be controlled by fabric filter. The control system shall be provided with adequate access for inspection and shall have a device for continuous measurement of pressure drop.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

11. The wood pulverizer shall be enclosed to prevent fugitive dust emissions. A fabric filter or other dust control methods, as approved by the Blue Ridge Regional Office, may be required after visible inspection by Agency personnel.
(9 VAC 5-80-1985 E and 9 VAC 5-50-90)

12. All conveyor belt returns shall be equipped with a belt scraper system. Scrapings shall be returned in an enclosed manner to the main flow of material.
(9 VAC 5-80-1985 E and 9 VAC 5-50-90)

13. Fugitive dust emissions from the ash and flue gas desulfurization product storage silo shall be controlled by mixing the discharge with water.
(9 VAC 5-80-1985 E and 9 VAC 5-50-90)

14. Fugitive dust emissions from the furnace bottom ash handling system shall be controlled by quenching ash with water. Fugitive dust emissions from the boiler generator bank conveyor and the mechanical collector hopper conveyor shall be saturated by water spray nozzles.
(9 VAC 5-80-1985 E and 9 VAC 5-50-90)

15. Fugitive emissions from all facility access roads shall be controlled by paving. Fugitive emissions from paved roads shall be controlled by wetting, sweeping, or other dust control methods, as approved by the Blue Ridge Regional Office.
(9 VAC 5-80-1985 E)

16. The yearly throughput of the biomass handling system shall not exceed 785,480 tons per year.
(9 VAC 5-80-1985 E)

17. Each primary boiler shall not operate more than 8,400 hours per year.
(9 VAC 5-80-1985 E)

18. The maximum firing rate of each primary boiler shall not exceed 394 x 10^6 Btu per hour. The total heat input to the primary boilers combined shall not exceed 6,109,480 x 10^6 Btu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1985 E)

19. The two diesel engines shall not operate more than a combined total of 382 hours per year.
(9 VAC 5-80-1985 E)

20. The auxiliary boiler and the primary boilers shall not be operated concurrently, except during start-up and shutdown, and then for no more than 12 hours over any consecutive 24-hour period and unless both primary boilers are operating at 50 percent capacity or less.
(9 VAC 5-80-1985 E and 9 VAC 5-80-1715)

21. Emissions from the operation of each primary boiler shall not exceed the limitations specified below:

	lbs/10^6 Btu	lbs/hr	tons/yr
Total PM			
Including condensable PM	---	12.00	50.41
Filterable PM only	0.019	7.5	---
Total PM10			
Including condensable PM	---	8.46	35.54
Filterable PM10 only	0.017	6.7	---
Total PM2.5			
Including condensable PM	---	7.92	33.28
Sulfur Dioxide	0.0125♦♦	4.9	19.1
Nitrogen Oxide*	0.135♦♦	53.2	206.2
Carbon Monoxide** (CO)	0.30♦♦	118.2	458.2
VOC**	---	5.14	21.61
Fluorides, as HF	---	0.38	1.62
Sulfuric Acid Mist	---	0.89	---

* Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.
** Lower limits may be imposed by the DEQ, after in-stack testing.
♦♦ Compliance is determined on 30-day rolling average

(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

22. Emissions from the operation of the auxiliary boiler shall not exceed the limitations specified below. Annual emissions are included in Condition 23.

	Natural Gas	
	lbs/10^6 Btu	lbs/hr
NOx	0.073* (30-day roll. avg.)	10.2*
CO	0.082	11.4
VOC	0.041	5.7

	No. 2 Fuel Oil	
	lbs/10^6 Btu	lbs/hr
PM	0.04	5.6
PM10	0.03	4.2
SO_2	0.31 (30-day roll. avg.)	43.2
NOx	0.2* (30-day roll. avg.)	27.9*
CO	0.082	11.4
VOC	0.041	5.7

*Based on high heat release rate.

During any 30-day period when both natural gas and No. 2 Fuel oil are fired, the allowable emission limit for the auxiliary boiler for that period shall be calculated using the equation shown in 40 CFR 60.44b(b), modified as follows:

En = [(ELg x Hg) + (ELo x Ho)] / (Hg + Ho)

where

En = the nitrogen oxides emission limit (expressed as NO_2), (lb/million BTU)

ELg = the individual natural gas emission limit as shown in this Condition, (lb/million BTU)

ELo = the individual No. 2 Fuel oil emission limit as shown in this Condition, (lb/million BTU)

Hg = the natural gas heat input, (million BTU/rolling 30-day period)

Ho = the No. 2 Fuel oil heat input, (million BTU/rolling 30-day period)

(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

23. Combined emissions from the operation of the primary boilers (2) and the auxiliary boiler shall not exceed the limitations specified below:

	tons/yr
PM	101.8
PM10	71.9
SO_2	46.0
NOx*	417.4
CO**	918.5
VOC**	44.2

These limitations are a summation of limits for the two primary boilers in accordance with condition 21and the auxiliary boiler operating 360 hours per year.

* Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.

** Lower limits may be imposed by the DEQ, after in-stack testing.

(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

24. Emissions from the operation of the diesel engines shall not exceed the limits specified below:

	lbs/hr	tons/yr
Nitrogen Oxides (as NO_2)	44.44	3.19
Carbon Monoxide	9.57	0.69

(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

25. Particulate emissions from the operation of the wood dust, ash, and lime storage and handling systems shall not exceed the limitations specified below:

PM	6.5	tons/yr
PM10	6.5	tons/yr
PM2.5	6.5	tons/yr

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions 5, 9, 10, 11, 12, 13, 14, 15, 29, 30 and 112.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, and 9 VAC 5-50-90)

26. Particulate emissions from the operation of the biomass handling system and storage pile shall not exceed the limitations specified below:

PM	1.57	tons/yr
PM10	0.60	tons/yr
PM2.5	0.10	tons/yr

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions 112, 28, and 16.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, and 9 VAC 5-50-90)

27. Visible emissions from the boiler stacks shall not exceed ten (10) percent opacity, except during one six minute period per hour which shall not exceed twenty (20) percent opacity.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

28. Visible emissions from biomass handling system shall not exceed 10 percent opacity as determined using the methods specified in 9 VAC 5-50-20 A.3.
(9 VAC 5-80-1985 E)

29. Visible emissions from the diesel engines and from fugitive emission points shall not exceed ten (10) percent opacity.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

30. Visible emissions from all fabric filters (except those on the primary boilers) shall not exceed five percent opacity.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

31. The approved fuel for the primary boilers is biomass. A change to the fuel may require a permit to modify and operate.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, and 9 VAC 5-80-1715)

32. The biomass shall meet the specifications below:
biomass means those residuals that are akin to traditional cellulosic biomass including forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, and tree harvesting residuals from logging and sawmill materials) wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, and clean biomass from land clearing operations, each as specified in the definition of Clean Cellulosic Biomass in 40 CFR 241.2, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. Approved biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.
(9 VAC 5-80-1985 E)

33. The approved fuel for the diesel engines is diesel fuel (No. 2 Fuel Oil). A change in the diesel engine fuel may require a permit to modify and operate.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, and 9 VAC 5-1715)

34. The approved fuels for the auxiliary boiler are natural gas and No. 2 Fuel Oil. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

35. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers, auxiliary boiler and the diesel engines shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall maintain records of all fuel oil shipments

purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

36. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers, auxiliary boiler and the diesel engines shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

37. Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO_2, NOx (at each boiler outlet), and CO_2 or O_2 emitted from the primary boilers. They shall be maintained, located and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office.
(9 VAC 5-80-1985 E and 9 VAC 5-50-40)

38. Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO2, NOx, and CO_2 or O_2 emitted from the auxiliary boiler. They shall be maintained and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office. Fuel testing for sulfur content in accordance with NSPS Subpart Db may be substituted for the SO2 continuous monitor with approval from the Blue Ridge Regional Office.
(9 VAC 5-80-1985 E and 9 VAC 5-50-40)

39. The continuous monitoring data generated by the SO2 and NOx monitors on the boilers shall be used to determine compliance with the lbs/MMBtu emission standards on a 30-day rolling average basis. All of the data capture, quality assurance provisions, and reporting requirements of NSPS Subpart Db shall apply. The excess emission report as required by NSPS Db for the auxiliary boiler shall include the emission limit for nitrogen oxides for each 30-day period as calculated in accordance with Condition 22 of this permit.
(9 VAC 5-80-1985 E and 9 VAC 5-50-40)

40. For all continuous monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. These monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and Appendix B).
(9 VAC 5-80-1985 E)

41. Continuous Emission Monitoring Systems (CEMS), meeting the design specifications of 40 CFR Part 60, Appendix B Performance Specification 4A, shall be installed to measure and record the emissions of CO from each primary boiler as lbs/MMBtu and lbs/hr. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with DEQ approved procedures which are equivalent to the requirements of 40 CFR 60.13 and Appendices B and F. Data shall be reduced to 30 day rolling averages per the procedures for NOx contained in 40 CFR 60 Subpart Db. The monitor shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/MMBtu basis) as noted in Condition 21.
(9 VAC 5-80-1985 E and 9 VAC 5-50-40)

42. A flowmeter shall be used to measure the stack gas airflow from the common stack with the flow apportioned by steam flow rate for each primary boiler utilizing the procedures for Part 75 apportionment. The stack gas flowmeter shall be installed, operated, and maintained in accordance with the provisions of 40 CFR 75 Appendices A and B, with the exception that the relative accuracy test audit (RATA) be performed at least once every four (4) consecutive calendar quarters. The permittee shall submit stack gas flowmeter reports as required by 40 CFR 75 Appendices A and B. The CO emissions (lb/hr basis) shall be calculated from data obtained from the CO continuous emissions monitoring system and stack gas flowmeter in accordance to the provisions of 40 CFR 75 Appendix F. These data shall be used to demonstrate compliance with the CO emission standard (lb/hr basis) as noted in Condition 21.
(9 VAC 5-80-1985 E and 9 VAC 5-50-40)

43. Performance evaluations of the CO continuous monitoring systems shall be conducted in accordance with 40 CFR Part 60, Appendix B. Two copies of the performance evaluations report shall be submitted to the Blue Ridge Regional Office within 45 days of the evaluation. The continuous monitoring systems shall be installed and operational prior to conducting initial performance evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30 day notification, prior to the demonstration of continuous monitoring system's performance, and subsequent notifications shall be submitted to the Blue Ridge Regional Office.
(9 VAC 5-80-1985 E and 9 VAC 5-50-40)

44. A CEMS quality control program which is equivalent to the requirements of 40 CFR 60.13 and Appendix B and F shall be implemented for the CO continuous monitoring systems.
(9 VAC 5-80-1985 E and 9 VAC 5-50-40)

45. The permittee shall furnish written reports to the Blue Ridge Regional Office of excess emissions from the primary boilers monitored by the CO continuous monitoring system on a quarterly basis, postmarked no later than the 30th day

following the end of the calendar quarter. These reports shall include, but are not limited to the following information:

a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;
b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;
c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

These reports shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-1985 E and 9 VAC 5-50-50)

46. Any host steam agreement, excluding financial terms, shall be made available on site for review by the DEQ upon request.
(9 VAC 5-80-1985 E)

47. The auxiliary boiler stack shall be 200 feet or greater.
(9 VAC 5-80-1985 E and 9 VAC 5-50-20)

48. The approved startup fuels for the primary boilers #1 and #2 are natural gas and No. 2 Fuel Oil meeting the sulfur content specified in Conditions 35 and 36. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1985 E, 9 VAC 5-50-280, and 9 VAC 5-80-1705)

49. The yearly combustion of No. 2 fuel oil in the primary boilers #1 and #2 shall not exceed a total of 60,000 gallons.
(9 VAC 5-80-1985 E)

50. All continuous monitoring systems and monitoring devices, as may be applicable for this source type, shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Performance evaluations of the continuous monitoring system shall take place during the performance tests under 9 VAC 5-50-30 or within 30 days thereafter. The Blue Ridge Regional Office shall be furnished with two copies of the report of the performance evaluations within 60 days of the evaluation.
(9 VAC 5-80-1985 E, 9 VAC 5-50-40, and 9 VAC 5-60-40)

51. **Stack Test** - Initial performance tests shall be conducted for SO2, NOx, CO, VOC, Sulfuric Acid Mist, and Fluorides, as HF from each primary boiler. These tests shall be conducted to determine compliance with the emission limits contained in Condition 21. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after test completion, whichever is earlier, and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, and 9 VAC 5-80-1675)

52. **Stack Test** –For each primary boiler, four performance tests shall be conducted for each of the following pollutants: Filterable PM, Total PM, Filterable PM10, Total PM10, Total PM2.5. Concurrently with each performance test the fuel analyses in accordance with Condition 53 shall be obtained. The performance tests shall be conducted to determine compliance with the emission limits contained in Condition 21. The initial performances tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Subsequent performance tests shall be performed, at least 75 but not more than 105 days after the directly preceding test. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to the initial performance test. The protocol shall cover all performance tests for the respective pollutant. One copy of the initial performance test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after completion of the test, whichever is earlier, and shall conform to the test report format enclosed with this permit. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after completion of each subsequent performance test and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, and 9 VAC 5-80-1675)

53. **Fuel Quality Data** – The permittee shall obtain the following fuel quality data:

    a. An analysis of the biomass heat content as-fired at least once per calendar week,
    b. an ultimate analysis of the biomass as-fired at least once per calendar quarter, and

c. an analysis of the biomass fluoride content as-fired at least once per calendar quarter.
d. The permittee shall submit a fuel shipment certification plan at least 60 days prior to facility startup for approval by the Blue Ridge Regional Office. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in this permit.

Details of the sampling procedures shall be arranged with the Blue Ridge Regional Office. Records of fuel quality data shall be available on site for inspection by Department personnel and shall be kept current for the most recent five year period. (9 VAC 5-80-1985 E)

54. **Concurrent VEE** - Concurrently with the initial performance tests required by Condition 52, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted on the primary boilers. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Blue Ridge Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test result shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit (9 VAC 5-50-30 and 9 VAC 5-80-1675)

55. **VEE Alternative** – A continuous opacity monitoring system may be used to satisfy the visible emission evaluation requirement in lieu of 40 CFR, Part 60, Appendix A, Method 9. The reported test data shall include averages of all six minute continuous periods within the test period and within the duration of any mass emission performance tests being conducted. It is the responsibility of the permittee to demonstrate that the monitoring system has met the requirements of the applicable performance evaluation, that the monitoring system has been properly maintained and operated, and that the resulting data has not been altered in any way. If monitoring system data indicates compliance for a period during which Method 9 data indicates non-compliance, the Method 9 data shall be used to determine compliance with the visible emission limit.
(9 VAC 5-80-1985 E and 9 VAC 5-50-20)

PART II – Minor New Source Review Permit Specific Conditions

Conditions 56 through 109 are established pursuant to 9 VAC 5-80-1100 *et seq*. The conditions are federally enforceable under the federal Clean Air Act. Additional **Source Wide Conditions** are contained in Part III below.

56. Particulate emissions from the primary boilers shall be controlled by an in-line multiple cyclone, a lime-water injection spray dryer, and a fabric filter rated at 99.9 percent control efficiency. The control systems shall be provided with adequate access for inspection. The fabric filter may be bypassed during boiler start-ups to alleviate potential moisture damage to the fabric filter at low start-up temperatures. Each fabric filter shall be equipped with a device to continuously measure pressure drop.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

57. Particulate emissions from the auxiliary boiler shall be controlled by combustion efficiency.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

58. Particulate emissions from the wood storage silo, the emergency truck loading station, lime storage silo, recycle bin, and discharge storage silo shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

59. Particulate emissions from the biomass hog shall be controlled by total enclosure.
(9 VAC 5-80-1180 and 9 VAC 5-50-90)

60. Sulfur dioxide emissions from the primary boilers shall be controlled by a lime-water injection spray dryer. The control system shall be provided with adequate access for inspection.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

61. Nitrogen oxide emissions from the primary boilers shall be controlled by continuous biomass feed systems, staged combustion low excess air, and selective non-catalytic reduction.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

62. The wood pulverizer systems shall include fabric filters for the collection of the pulverized wood fuel. The fabric filters shall be provided with adequate access for inspection.
(9 VAC 5-80-1180)

63. Lime slaker emissions shall be controlled by fabric filter. The control system shall be provided with adequate access for inspection and shall have a device for continuous measurement of pressure drop.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

64. The wood pulverizer shall be enclosed to prevent fugitive dust emissions. A fabric filter or other dust control methods, as approved by the Blue Ridge Regional Office, may be required after visible inspection by Agency personnel.
(9 VAC 5-80-1180 and 9 VAC 5-50-90)

65. All conveyor belt returns shall be equipped with a belt scraper system. Scrapings shall be returned in an enclosed manner to the main flow of material.
(9 VAC 5-80-1180 and 9 VAC 5-50-90)

66. Fugitive dust emissions from the ash and flue gas desulfurization product storage silo shall be controlled by mixing the discharge with water.
(9 VAC 5-80-1180 and 9 VAC 5-50-90)

67. Fugitive dust emissions from the furnace bottom ash handling system shall be controlled by quenching ash with water. Fugitive dust emissions from the boiler generator bank conveyor and the mechanical collector hopper conveyor shall be saturated by water spray nozzles.
(9 VAC 5-80-1180 and 9 VAC 5-50-90)

68. Fugitive emissions from all facility access roads shall be controlled by paving. Fugitive emissions from paved roads shall be controlled by wetting, sweeping, or other dust control methods, as approved by the Blue Ridge Regional Office.
(9 VAC 5-80-1180)

69. The yearly throughput of the biomass handling system shall not exceed 785,480 tons per year.
(9 VAC 5-80-1180)

70. Each primary boiler shall not operate more than 8,400 hours per year.
(9 VAC 5-80-1180)

71. The maximum firing rate of each primary boiler shall not exceed 394 x 10^6 Btu per hour. The total heat input to the primary boilers combined shall not exceed 6,109,480 x 10^6 Btu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

72. The two diesel engines shall not operate more than a combined total of 382 hours per year.
(9 VAC 5-80-1180)

73. The auxiliary boiler and the primary boilers shall not be operated concurrently, except during start-up and shutdown, and then for no more than 12 hours over any consecutive 24-hour period and unless both primary boilers are operating at 50 percent capacity or less.
(9 VAC 5-80-1180)

74. Emissions from the operation of each primary boiler shall not exceed the limitations specified below:

	lbs/10^6 Btu	lbs/hr	tons/yr
Total PM			
Including condensable PM	---	12.00	50.41
Filterable PM only	0.019	7.5	---
Total PM10			
Including condensable PM	---	8.46	35.54
Filterable PM10 only	0.017	6.7	---
Total PM2.5			
Including condensable PM	---	7.92	33.28
Sulfur Dioxide	0.0125♦♦	4.9	19.1
Nitrogen Oxide*	0.135♦♦	53.2	206.2
Carbon Monoxide** (CO)	0.30♦♦	118.2	458.2
VOC**	---	5.14	21.61
Fluorides, as HF	---	0.39	1.64
Sulfuric Acid Mist	---	0.89	---

* Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.
** Lower limits may be imposed by the DEQ, after in-stack testing.
♦♦ Compliance is determined on 30-day rolling average
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

75. Emissions from the operation of the auxiliary boiler shall not exceed the limitations specified below. Annual emissions are included in Condition 76.

	Natural Gas	
	lbs/10^6 Btu	lbs/hr
NOx	0.073* (30-day roll. avg.)	10.2*
CO	0.082	11.4
VOC	0.041	5.7

	No. 2 Fuel Oil	
	lbs/10^6 Btu	lbs/hr
PM	0.04	5.6
PM10	0.03	4.2
SO_2	0.31 (30-day roll. avg.)	43.2
NOx	0.2* (30-day roll. avg.)	27.9*
CO	0.082	11.4
VOC	0.041	5.7

*Based on high heat release rate.

During any 30-day period when both natural gas and No. 2 Fuel oil are fired, the allowable emission limit for the auxiliary boiler for that period shall be calculated using the equation shown in 40 CFR 60.44b (b), modified as follows:

$$En = [(ELg \times Hg) + (ELo \times Ho)] / (Hg + Ho)$$

where
En = the nitrogen oxides emission limit (expressed as NO_2), (lb/million BTU)
ELg = the individual natural gas emission limit as shown in this Condition, (lb/million BTU)
ELo = the individual No. 2 Fuel oil emission limit as shown in this Condition, (lb/million BTU)
Hg = the natural gas heat input, (million BTU/rolling 30-day period)
Ho = the No. 2 Fuel oil heat input, (million BTU/rolling 30-day period)

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

76. Combined emissions from the operation of the primary boilers (2) and the auxiliary boiler shall not exceed the limitations specified below:

	tons/yr
PM	101.8
PM10	71.9
SO_2	46.0

NOx*	417.4
CO**	918.5
VOC**	44.2

These limitations are a summation of limits for the two primary boilers in accordance with condition 74 and the auxiliary boiler operating 360 hours per year.

* Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.
** Lower limits may be imposed by the DEQ, after in-stack testing.

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

77. Emissions from the operation of the diesel engines shall not exceed the limits specified below:

	lbs/hr	tons/yr
Nitrogen Oxides (as NO_2)	44.44	3.19
Carbon Monoxide	9.57	0.69

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

78. Particulate emissions from the operation of the wood dust, ash, and lime storage and handling systems shall not exceed the limitations specified below:

PM	6.5	tons/yr
PM10	6.5	tons/yr
PM2.5	6.5	tons/yr

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions 58, 62, 63, 64, 65, 66, 67, 68, 82, 83, and 112.
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-50-90)

79. Particulate emissions from the operation of the biomass handling system and storage pile shall not exceed the limitations specified below:

PM	1.57	tons/yr
PM10	0.60	tons/yr
PM2.5	0.10	tons/yr

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions 112, 81, and 69
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-50-90)

80. Visible emissions from the boiler stacks shall not exceed ten (10) percent opacity, except during one six minute period per hour which shall not exceed twenty (20) percent opacity.
(9 VAC 5-80-1180 and 5-50-260)

81. Visible emissions from biomass handling system shall not exceed 10 percent opacity as determined using the methods specified in 9 VAC 5-50-20 A.3.
(9 VAC 5-80-1180)

82. Visible emissions from the diesel engines and from fugitive emission points shall not exceed ten (10) percent opacity.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

83. Visible emissions from all fabric filters (except those on the primary boilers) shall not exceed five percent opacity.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

84. The approved fuel for the primary boilers is biomass. A change to the fuel may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

85. The biomass shall meet the specifications below:
biomass means those residuals that are akin to traditional cellulosic biomass including forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, and tree harvesting residuals from logging and sawmill materials) wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, and clean biomass from land clearing operations, each as specified in the definition of Clean Cellulosic Biomass in 40 CFR 241.2, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. Approved biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.
(9 VAC 5-80-1180)

86. The approved fuel for the diesel engines is diesel fuel (No. 2 Fuel Oil). A change in the diesel engine fuel may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

87. The approved fuels for the auxiliary boiler are natural gas and No. 2 Fuel Oil. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

88. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers, auxiliary boiler and the diesel engines shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall maintain records of all fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

89. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers, auxiliary boiler and the diesel engines shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

90. Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO_2, NOx (at each boiler outlet), and CO_2 or O_2 emitted from the primary boilers. They shall be maintained, located and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office.
(9 VAC 5-80-1180 and 9 VAC 5-50-40)

91. Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO_2, NOx, and CO_2 or O_2 emitted from the auxiliary boiler. They shall be maintained and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office. Fuel testing for sulfur content in accordance with NSPS Subpart Db may be substituted for the SO_2 continuous monitor with approval from the Blue Ridge Regional Office.
(9 VAC 5-80-1180 and 9 VAC 5-50-40)

92. The continuous monitoring data generated by the SO_2 and NOx monitors on the boilers shall be used to determine compliance with the lbs/MMBtu emission standards on a 30-day rolling average basis. All of the data capture, quality assurance provisions, and reporting requirements of NSPS Subpart Db shall apply. The excess emission report as required by NSPS Db for the auxiliary boiler shall include the emission limit for nitrogen oxides for each 30-day period as calculated in accordance with Condition 75 of this permit.
(9 VAC 5-80-1180 and 9 VAC 5-50-40)

93. For all continuous monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. These monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and Appendix B).
(9 VAC 5-80-1180)

94. Continuous Emission Monitoring Systems (CEMS), meeting the design specifications of 40 CFR Part 60, Appendix B Performance Specification 4A, shall be installed to measure and record the emissions of CO from each primary boiler as lbs/MMBtu and lbs/hr. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with DEQ approved procedures which are equivalent to the requirements of 40 CFR 60.13 and Appendices B and F. Data shall be reduced to 30 day rolling averages per the procedures for NOx contained in 40 CFR 60 Subpart Db. The monitor shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/MMBtu basis) as noted in Condition 74.
(9 VAC 5-80-1180 and 9 VAC 5-50-40)

95. A flowmeter shall be used to measure the stack gas airflow from the common stack with the flow apportioned by steam flow rate for each primary boiler utilizing the procedures for Part 75 apportionment. The stack gas flowmeter shall be installed, operated, and maintained in accordance with the provisions of 40 CFR 75 Appendices A and B, with the exception that the relative accuracy test audit (RATA) be performed at least once every four (4) consecutive calendar quarters. The permittee shall submit stack gas flowmeter reports as required by 40 CFR 75 Appendices A and B. The CO emissions (lb/hr basis) shall be calculated from data obtained from the CO continuous emissions monitoring system and stack gas flowmeter in accordance to the provisions of 40 CFR 75 Appendix F. These data shall be used to demonstrate compliance with the CO emission standard (lb/hr basis) as noted in Condition 74.
(9 VAC 5-80-1180 and 9 VAC 5-50-40)

96. Performance evaluations of the CO continuous monitoring systems shall be conducted in accordance with 40 CFR Part 60, Appendix B. Two copies of the performance evaluations report shall be submitted to the Blue Ridge Regional Office within 45 days of the evaluation. The continuous monitoring systems shall be installed and operational prior to conducting initial performance evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30 day notification, prior to the demonstration of continuous monitoring system's performance, and subsequent notifications shall be submitted to the Blue Ridge Regional Office.
(9 VAC 5-80-1180 and 9 VAC 5-50-40)

97. A CEMS quality control program which is equivalent to the requirements of 40 CFR 60.13 and Appendix B and F shall be implemented for the CO continuous monitoring systems.
(9 VAC 5-80-1180 and 9 VAC 5-50-40)

98. The permittee shall furnish written reports to the Blue Ridge Regional Office of excess emissions from the primary boilers monitored by the CO continuous monitoring system on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:
    a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;
    b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;
    c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
    d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

    These reports shall be available for inspection by the DEQ and shall be current for the most recent five years.
    (9 VAC 5-80-1180 and 9 VAC 5-50-50)

99. Any host steam agreement, excluding financial terms, shall be made available on site for review by the DEQ upon request.
(9 VAC 5-80-1180)

100. The auxiliary boiler stack shall be 200 feet or greater.
(9 VAC 5-80-1180 and 9 VAC 5-50-20)

101. The approved startup fuels for the primary boilers #1 and #2 are natural gas and No. 2 Fuel Oil meeting the sulfur content specified in Conditions 88 and 89. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

102. The yearly combustion of No. 2 fuel oil in the primary boilers #1 and #2 shall not exceed a total of 60,000 gallons.
(9 VAC 5-80-1180)

103. No project shall result in a major modification as defined in 9 VAC 5-80-1615 without receiving a permit pursuant to 9 VAC 5-80 Article 8. For projects which rely on excluded emissions (subsection c of the definition of "projected actual emissions" in 9 VAC 5-80-1615) to be exempt from review under 9 VAC 5-80 Article 8, the following conditions shall apply:

a. The permittee shall maintain records sufficient to demonstrate the project did not result in a major modification as defined in 9 VAC 5-80-1615. Any increase in emissions without sufficient documentation shall be attributed to the project.
b. If annual emissions after the project (12 month rolling total) exceed the "baseline actual emissions" (as defined in 9 VAC 5-80-1615) for the project by a "significant" amount (as defined in 9 VAC 5-80-1615), the permittee shall notify the Blue Ridge Regional Office within fifteen (15) days after the event.

For each applicable project, Conditions 103.a and 103.b are effective for the projection period as prescribed in the definition of "projected actual emissions" located in 9 VAC 5-80-1615. Nothing in this condition shall restrict when the Board may find the permittee in violation of 9 VAC 5-80-1625 A.
(9 VAC 5-80-1180 A)

104. All continuous monitoring systems and monitoring devices, as may be applicable for this source type, shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Performance evaluations of the continuous monitoring system shall take place during the performance tests under 9 VAC 5-50-30 or within 30 days thereafter. The Blue Ridge Regional Office shall be furnished with two copies of the report of the performance evaluations within 60 days of the evaluation.
(9 VAC 5-80-1180, 9 VAC 5-50-40, and 9 VAC 5-60-40)

105. **Stack Test** - Initial performance tests shall be conducted for SO2, NOx, CO, VOC, Sulfuric Acid Mist, and Fluorides, as HF from each primary boiler. These tests shall be conducted to determine compliance with the emission limits contained in Condition 74. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after test completion, whichever is earlier, and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, and 9 VAC 5-80-1200)

106. **Stack Test** – For each primary boiler, four performance tests shall be conducted for each of the following pollutants: Filterable PM, Total PM, Filterable PM10, Total

PM10, Total PM2.5. Concurrently with each performance test the fuel analyses in accordance with Condition 107 shall be obtained. The performance tests shall be conducted to determine compliance with the emission limits contained in Condition 74. The initial performances tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Subsequent performance tests shall be performed, at least 75 but not more than 105 days after the directly preceding test. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to the initial performance test. The protocol shall cover all performance tests for the respective pollutant. One copy of the initial performance test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after completion of the test, whichever is earlier, and shall conform to the test report format enclosed with this permit. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after completion of each subsequent performance test and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, and 9 VAC 5-80-1675)

107. **Fuel Quality Data** – The permittee shall obtain the following fuel quality data:

a. An analysis of the biomass heat content as-fired at least once per calendar week,
b. an ultimate analysis of the biomass as-fired at least once per calendar quarter, and
c. an analysis of the biomass fluoride content as-fired at least once per calendar quarter.
d. The permittee shall submit a fuel shipment certification plan at least 60 days prior to facility startup for approval by the Blue Ridge Regional Office. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in this permit.

Details of the sampling procedures shall be arranged with the Blue Ridge Regional Office. Records of fuel quality data shall be available on site for inspection by Department personnel and shall be kept current for the most recent five year period.
(9 VAC 5-80-1985 E)

108. **Concurrent VEE** -Concurrently with the initial performance tests required by Condition 106, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted on the primary boilers. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to

testing. The evaluation shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Blue Ridge Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test result shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit (9 VAC 5-50-30 and 9 VAC 5-80-1200)

109. **VEE Alternative** – A continuous opacity monitoring system may be used to satisfy the visible emission evaluation requirement in lieu of 40 CFR, Part 60, Appendix A, Method 9. The reported test data shall include averages of all six minute continuous periods within the test period and within the duration of any mass emission performance tests being conducted. It is the responsibility of the permittee to demonstrate that the monitoring system has met the requirements of the applicable performance evaluation, that the monitoring system has been properly maintained and operated, and that the resulting data has not been altered in any way. If monitoring system data indicates compliance for a period during which Method 9 data indicates non-compliance, the Method 9 data shall be used to determine compliance with the visible emission limit.
(9 VAC 5-80-1180 and 9 VAC 5-50-20)

PART III – Source Wide Conditions

110. Altavista Power Station is located at 104 Wood Lane off Business Route 29 next to the Town and Country Shopping Center in Altavista, Virginia.
(9 VAC 5-80-1985 D and 9 VAC 5-80-1180)

111. Construction and operation shall be as proposed in the permit application dated May 4, 1988, including amendments referenced in Part IV.
(9 VAC 5-80-1985 D and 9 VAC 5-80-1180)

112. **Fugitive Dust and Fugitive Emission Controls** – Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:

a. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, grading of roads, or clearing of land.
b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition.
c. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

d. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion.
e. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
f. Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design.
g. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
(9 VAC 5- 80-1180 and 9 VAC 5-50-90)

113. **Emissions Testing** - The electricity generating facility shall be modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-80-1180, 9 VAC 5-50-30F, and 9 VAC 5-80-1675)

114. **Initial Notifications** - The permittee shall furnish written notification to the Blue Ridge Regional Office of:

a. The actual date on which modification of the electricity generating facility commenced within 30 days after such date.

b. The actual date on which start up of the biomass handling system occurred within 30 days of such date.

c. The actual start-up date of the modified electricity generating facility within 15 days after such date.

d. The anticipated date of performance tests postmarked at least 30 days prior to such date.

e. The anticipated date of continuous monitoring system performance evaluations postmarked not less than 30 days prior to such date.

f. The intention to use continuous opacity monitoring system data results to demonstrate compliance with the applicable visible emission limit during a performance test in lieu of Reference Method 9 (reference 40 CFR Part 60,

Appendix A), postmarked not less than 30 days prior to the date of the performance test.

Copies of the written notification referenced in items a, c, and e above are to be sent to:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-1180, 9 VAC 5-50-50 and 9 VAC 5-80-1985 E)

115. **On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

Primary boilers

a. The annual hours of operation for each boiler calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

b. Records of the maximum firing rate of each primary boiler.

c. The total annual heat input to the primary boilers. The annual total shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

d. Continuous monitoring system requirements and emissions monitoring results to demonstrate compliance with Conditions 21 and 74.

e. Stack test results to demonstrate compliance with Condition 21 and 74.

f. All reports required by 40 CFR 60 Subpart Db for the primary boilers.

g. Any additional information required to demonstrate compliance with 40 CFR 60 Subpart Db.

h. The daily and annual throughput of distillate oil, natural gas, and biomass, each in units of MMBtu, used for each primary boiler. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

i. All fuel supplier certifications.

j. Verification that the primary boilers and the auxiliary boiler were not operated concurrently in accordance with Conditions 20 and 73 of this permit.

k. All fuel quality data in accordance with Conditions 53 and 107.

Auxiliary boiler

l. The daily and annual throughput of distillate oil (in 1000 gallons) used for the auxiliary boiler. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

m. All fuel supplier certifications.

n. The annual rolling average sulfur content of the distillate oil burned in the auxiliary boiler, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

o. The annual hours of operation for the auxiliary boiler calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

p. Verification that the primary boilers and the auxiliary boiler were not operated concurrently in accordance with Conditions 20 and 73 of this permit.

q. All reports required by 40 CFR 60 Subpart Db for the auxiliary boiler.

Diesel Engines

r. Annual hours of operation of the diesel engines, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most

recently completed calendar month to the individual monthly totals for the preceding 11 months.

s. The maximum sulfur content per shipment of distillate oil burned in the diesel engines.

t. The annual rolling average sulfur content of the distillate oil burned in the diesel engines, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

Material handling

u. The annual throughput of the biomass handling system (in tons). The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

Oil Storage Tank

v. The permittee shall keep readily accessible records showing tank dimensions and an analysis showing the capacity of the distillate oil storage tank and shall report to the South Central Regional Office if the maximum true vapor pressure of the stored product exceeds 0.50 psi.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-20E, 9 VAC 5-50-50, 9 VAC 5-80-1180, 9 VAC 5-80-1985, and 9 VAC 5-50-410)

116. **Records** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

a. The name of the fuel supplier

b. The date on which the distillate oil was received

c. The volume of distillate delivered in the shipment

d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and

e. The sulfur content of the distillate oil

(9 VAC 5-50-50, 9 VAC 5-80-1180, 9 VAC 5-80-1985, and 9 VAC 5-50-410)

117. **Permit Invalidation** – This permit to modify the electricity generating facility shall become invalid, unless an extension is granted by the DEQ, if:

    a. A program of continuous modification is not commenced within the latest of the following:

        i. 18 months from the date of this permit

        ii. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;

        iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or

    b. A program of modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project

    (9 VAC 5-80-1210, and 9 VAC 5-80-1925)

118. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:

    a. Knowingly makes material misstatements in the permit application or any amendments to it;

    b. Fails to comply with the conditions of this permit;

    c. Fails to comply with any emission standards applicable to a permitted emissions unit;

    d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or

    e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

    (9 VAC 5-80-1210 F, and 9 VAC 5-80-1985 F)

119. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency. (9 VAC 5-80-1180, 9 VAC 5-170-130, and 9 VAC 5-80-1985 E)

120. **Maintenance/Operating Procedures** –The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

b. Maintain an inventory of spare parts.

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-80-1180 D, 9 VAC 5-50-20 E and 9 VAC 5-80-1985 E)

121. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more

than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-80-1180 D, 9 VAC 5-20-180 J, and 9 VAC 5-80-1985 E)

122. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Blue Ridge Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Blue Ridge Regional Office.
(9 VAC 5-80-1180, 9 VAC 5-20-180 C, and 9 VAC 5-80-1985 E)

123. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-80-1180, 9 VAC 5-20-180 I, and 9 VAC 5-80-1985 E)

124. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Blue Ridge Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240 B, and 9 VAC 5-80-1975 B)

125. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180, and 9 VAC 5-80-1985 E)

PART IV - DOCUMENT LIST

1. Ultrasystems Development Corporation permit application, dated May 4, 1988 and signed by Harvey J. Padewar.

2. 88-05-05 Ultrasystems Development Corporation letter to VDAPC confirming May 12, 1988 meeting agenda.

3. 88-05-12 VDAPC memo on May 12, 1988 meeting.

4. 88-05-27 VDAPC-AEDTS letter of Determination to Ultrasystems Development Corporation (Padewar), re: Altavista site.

5. 88-10-28 Ultrasystems Development Corporation - ESD letters to VDPAC Regions II, III, V, and VI, conveying BACT Analysis to Buena Vista, Covington, Altavista, Hopewell and Franklin sites.

6. 88-11-16 Ultrasystems Development Corporation - ESD letters to VDAPC Regions II, III, V, and VI, Description of Materials Handling System, with SAPCB Form 7 (Permit Application) Revisions/Plot Plan, for respective sites.

7. 88-12-27 VDAPC-AEDTS letter to Ultrasystems Development Corporation - ESD (Hurt), requesting explanations regarding the Ultrasystems Development Corporation October 1988 BACT Analyses.

8. 89-01-06 VDAPC-AEDTS letter to Ultrasystems Development Corporation -ESD (Hurt), reiterating problems connected with applicant's air quality analysis protocols and repeating requests for information.

9. 89-02-07 Ultrasystems Development Corporation Interoffice Correspondence, ESD (Hurt) to B. Owens, ULTRA-COGEN - Standby Boilers and Supplemental Fuel Firing (copy sent to VDAPC-DTE).

10. 89-02-23 Ultrasystems Development Corporation letter to VDAPC-AEDTS, Revised Best Available Control Technology Analysis.

11. 89-03-03 Department of Mines, Minerals and Energy (G. Wilkes) informal note to VDAPC-DTE (Jack Schubert), transmitting reports of analyses, Virginia and other coals.

12. 89-03-08 Ultrasystems Development Corporation facsimile transmission to VDAPC-DTE, conveying information on planned method for burning waste wood in boilers at Altavista plant, estimated emission factor and vendor description of wood burner from Cogen.

13. 89-03-08 Ultrasystems Development Corporation - ESD letters to VDAPC Regions II, III, V, VI, stating planned use of auxiliary (standby boiler) at each site and transmitting revisions to SAPCB Form 7 (Permit Application).

14. 89-03-14 Lane Company letter to Ultrasystems.

15. 89-03-21 E. J. Goller (VMI Chemistry Department) letter to Ultrasystems Development Corporation (R. Kennel), pointing out available NOx pollution control technology options contrary to the Ultrasystems Development Corporation BACT Analysis conclusions.

16. 89-03-27 VDAPC-DCS letter to the Ultrasystems Development Corporation - ESD (Hurt), conveying values and procedures for use in applicant's air quality analyses.

17. 89-03-28 VDAPC-DCS letter to the Ultrasystems Development Corporation (R. Kennel) letter to VDAPC-AEDTS, Additional Information Request, withdrawing Covington site application and advising of (1) start of Buena Vista meteorological monitoring, (2) plans to use continuous coal feed subsystem in all plants, (3) actions to purchase lower sulfur coal at Buena Vista, (4) commitment by one host not to operate boilers simultaneously with Ultrasystems Development Corporation, and (6) decision to limit annual operations to 8,400 hours at all plants.

18. 89-03-28 Ultrasystems Development Corporation - ESD letter to VDAPC - AEDTS, Additional Information Request, with attachment entitled "Ultrasystems Response to VDAPC comments and questions given at the March 10, 1989 Meeting".

19. 89-04-03 Ultrasystems Development Corporation (R. P. Kennel) letter to Professor E. J. Goller, VMI, in response to Goller's March 21, 1989 letter.

20. 89-04-19 Ultrasystems Development Corporation letter to VDAPC-AEDTS, requesting background information relating to tentative VDAPC BACT Determinations of April 18, 1989.

21. 89-04-20 VDAPC-ADETS letter to Ultrasystems Development Corporation (R. Kennel), providing information requested on April 19, 1989 in text and by enclosures.

22. 89-04-27 Ultrasystems Development Corporation letter to VDAPC-AEDTS, requesting approval of previously-submitted modelling protocols and conveying information on control equipment vendor guarantees.

23. 89-04-28 VDAPC-DTE Facsimile Transmission to Ultrasystems Development Corporation - ESD (Hurt), providing copies of Cogentrix Portsmount permit, an SCC emission factor listing, and another copy of the BACT definition previously provided.

24. 89-05-02 Ultrasystems Development Corporation letter to VDAPC-DCS, ULTRA-COGEN - Significant Impact Distances.

25. 89-05-10 Town of Altavista Special Use Permit for Ultra Cogen.

26. 89-05-10 VDAPC-DCS letter to Ultrasystems Development Corporation, approving revised modelling protocols for Southhampton and Altavista sites, subject to conditions stated in the letter.

27. 89-05-12 Ultrasystems Development Corporation letter, ULTRA COGEN Air Permits, May 10 meeting.

28. 89-05-15 VDAPC-DTE (John Schubert) Memorandum to File, Minutes of Ultrasystems/VDAPC May 10, 1989 Meeting.

29. 89-05-18 VDAPC-DCS Memorandum to File, May 11, 1989 Meeting with Ultrasystems Representatives.

30. 89-05-23 VDAPC-AEDTS letter to Ultrasystems Development Corporation, (R. Kennel), confirming VDAPC positions (decisions) on BACT and modelling requirements for the four sites being proposed by Ultrasystems Development Corporation.

31. 89-05-24 Ultrasystems Development Corporation letter to VDAPC-AEDTS, giving Ultrasystems Development Corporation understandings of available options under NOx/SO_2 adverse ambient impacts.

32. 89-05-31 VDAPC-AEDTS letter to Ultrasystems Development Corporation (Kennel) clarifying NOx/SO_2 BACT under adverse ambient impacts.

33. 89-06-01 Ultrasystems Development Corporation, Incorporated letter to VDAPC-DTE, Curtailment of Host Boiler Operations, transmitting copies of host - Ultrasystems Development Corporation letters, same subject.

34. 89-06-28 Ultrasystems Development Corporation letter to VDAPC-DTE transmitting excerpts from Energy Services Agreements with hosts.

35. 89-07-17 VDAPC-AEDTS letter to Ultrasystems Development Corporation, giving estimated schedule for completion of processing first (Altavista) application.

36. 89-07-18 Ultrasystems Environmental Services letter to VDAPC Region III, ULTRA COGEN - Altavista Materials Handling Systems Description, with revisions to SAPCB Form 7.

37. 89-07-25 VDAPC-AEDTS letter to Ultrasystems Development Corporation documenting request for Ultrasystems position re: host source emissions, with proposed host-to-VDAPC letter requesting permit.

38. 89-08-03 VDAPC-DCS letter to Ultrasystems Development, Incorporated (ESD) transmitting preliminary draft data for other source modelling at Altavista, Franklin and Hopewell.

39. 89-08-07 Ultrasystems Environmental Services letter to VDAPC-DTE, ULTRA COGEN Projects: Maximum Facility Emissions.

40. 89-08-08 VDAPC (Ultrasystems Working Group) memorandum to DCS modelers clarifying Ultrasystems planned operating modes for boilers.

41. 89-08-09 Ultrasystems Environmental Services letter to VDAPC-DTE, providing expected fuel use rates for auxiliary boilers.

42. 89-08-09 Ultrasystems Development, Incorporated (ESD) Facsimile Transmission to VDAPC-DTE, conveying Coen Company August 8, 1989 memo, ULTRA COGEN Virginia.

43. 89-08-16 VDAPC-AEDTS letter to EPA III (Air Management Division) concerning problems in implementing March 16, 1988 modelling guidance.

44. 89-08-21 VDAPC-AEDTS letter to Ultrasystems Development Corporation, advising of progress in review of applicant modeling reports.

45. 89-08-25 Ultrasystems Development Corporation letter to J. Schubert giving standby boiler heat release rates.

46. 89-09-08 VDAPC-DTE schematic of primary coal boilers and associated systems.

47. 89-09-08 VDAPC calculations sheet for primary coal boilers.

48. 89-09-15 VDAPC-AEDTS letter to Ultrasystems Development Corporation, transmitting a generic draft permit for the four proposed cogeneration sites.

49. 89-09-19 Ultrasystems Development Corporation letter to John M. Daniel outlining name change for projects.

50. 89-09-22 Ultrasystems Environmental Services letter to VDAPC - Region VI, transmitting diagram of belt conveyor with cover to be used at the four proposed sites.

51. 89-09-28 Protec letter to Ultrasystems (Environmental Division), Portec Lime Slaker Dust Suppression, with attached diagram. Note: This letter was transmitted to VDAPC-AEDTS the same day, as response to VDAPC query on Ultrasystems Development Corporation intentions for control of emissions from slaker.

52. 89-09-28 VDAPC calculations sheet for auxiliary boiler.

53. 89-10-05 KBN Engineering letter to VDAPC-DCS, Ultra Cogen - Altavista: SO_2 and NOx Impact Analyses of all Sources at Maximum Allowable Emissions and Certain Sources at 120 Percent of Actual Emissions.

54. 89-10-18 Ultrasystems Development Corporation letter to VDAPC (L. Alexander) describing fugitive dust control systems.

55. 89-10-19 Ultrasystems Development Corporation letter to VDAPC (L. Alexander) outlining coal and wood crusher systems.

56. 89-10-19 VDAPC-DTE Toxics Analysis.

57. 89-10-27 Department of Air Pollution Control, Division of Technical Evaluation/Region III engineering analysis.

58. 89-11-01 VDAPC-DCS (Austin) Memorandum to Director, Division of Computer Service Review of Air Quality Impact Analysis for Ultrasystems Altavista. Final analysis data received from Ultrasystems Development Corporation on October 26, 1989, and amended on February 12, 1990.

59. 89-12-06 Ultrasystems Development Corporation letter (R. Kennel) to VDAPC-AEDTS regarding Response to EPA Comments on Draft Permit for Hadson Power 12 - Altavista.

60. 89-12-11 Ultrasystems Environmental Services document entitled "Response to EPA Comments on the Proposed Hadson Power 12 - Altavista Project dated November 30, 1989."

61. 90-01-02 KBN letter (R. McCann) to VDAPC-DCS regarding Hadson Power 12 - Altavista Cogeneration Project: Use of Trinity Method for Determining Operating Data.

62. 90-01-19 KBN letter (R. McCann) to VDAPC-DCS regarding Intermediate Terrain, Hadson Power 12 - Altavista Project.

63. 90-02-05 KBN letter (R. McCann) to VDAPC-DCS regarding Hadson Power 12 - Altavista Cogeneration Project: Intermediate Terrain Modeling Analysis.

64. 90-02-05 Ultrasystems Environmental Services letter (P. Hurt) transmitting a document entitled "Air Quality Analysis of Standby Boiler and Startup/Shutdown Operations for the Hadson Power 12 - Altavista Project."

65. 90-02-05 Ultrasystems Development Corporation letter (R. Kennel) to VDAPC (T. Henderson) regarding Hadson Power 12 - Altavista Draft Permit Changes.

66. 90-02-09 VDAPC Region III Board Presentation.

67. Department of Air Pollution Control notification letter to the Altavista Town Manager, dated May 27, 1988.

68. Department of Air Pollution Control notification letter to Shenandoah National Park, dated May 27, 1988.

69. Federal NSPS Regulations Part 60 Subpart Da, Standards of Performance for Electrical Utility Steam Generating Units.

70. Federal NSPS Regulations Part 60 Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

71. Federal NSPS Regulations Part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

72. 93-11-02 LG&E - Westmoreland Altavista letter and application to increase the BTU rating of the two Babcock & Wilcox boilers and the Nebraska auxiliary boiler and to implement the use of #2 fuel oil as a startup fuel for the #2 primary coal boiler.

73. 93-11-24 LG&E - Westmoreland Altavista revised page 9 of the Form 7.

74. 93-11-24 Boiler Specification sheets for the Babcock & Wilcox boilers and the Nebraska auxiliary boiler.

75. 96-02-08 Air permit modification application.

76. 96-03-26 Distillate oil storage tank specification.

77. 96-04-08 Vacuum blower arrangement clarification.

78. 96-04-10 Distillate oil storage tank vapor pressure respecification.

79. 2006-11-09 Application for CO BACT limit change and increased wood combustion projects.

80. 2007-01-10 Submittal with additional information regarding CO BACT, emission factors, dispatch modeling, stack parameters, and wood combustion project.

81. 2007-03-28 Submittal with Article 6 BACT analysis for wood combustion project.

82. 2007-04-30 Submittal containing description of dispatch model, reasoning for selection of excludable emissions (demand growth) projection, and emissions calculations for PAE-BAE applicability test.

83. 2007-06-06 Submittal of SERC report and VA SCC reports as supporting documentation for PAE-BAE test assumptions.

84. 2007-06-12 Email clarifying difference between SERC report and modeled demand growth.

85. 2007-06-14 Local Governing Body Certification

86. 2007-07-02 Email and attached Town of Altavista Special Use Permit (amended)

87. 2007-13-09 Submittal of additional Article 6 BACT information

88. 2011-05-13 Park Service email Shepherd to Kiss RE: no AQRS analysis required for SNP

89. 2011-05-19 Forest Service email Pitrolo to Kiss RE: no AQRS analysis required

90. 2011-05-25 Dominion application for conversion of APS from a coal and wood fired facility to a biomass fired facility with No. 2 fuel oil and natural gas as startup fuels.

91. 2011-09-29 Dominion response letter to DEQ Initial Letter of Determination questions

92. 2011-12-01 Dominion email Labrie to Berkeley RE: emergency diesel generator not at APS

93. 2011-12-13 Dominion email Labrie to Berkeley RE: stack parameters during startup

94. 2012-01-24 Document Certification for Dominion letter dated 1-17-12 transmitting re-calculated baseline emissions in response to DEQ letter dated Nov. 22, 2011

95. 2012-01-31 Dominion letter RE: Filterable Particulate Matter Permitted Emission Rates

96. 2012-01-31 Dominion email Labrie to Berkeley RE: B&W performance guarantees

97. 2012-02-10 Dominion 9:13 AM email Labrie to Berkeley RE: H2SO4 and HCl emissions

98. 2012-02-10 Dominion 4:10 PM email Labrie to Berkeley RE: Thermal Oxidizer data

99. 2012-02-10 Document Certification for Dominion letter dated 2/9/12 requesting deferral of project CO2 consideration in GHG determination.

100. 2012-02-21 EPA Region III letter RE: Applicability Determination for Biomass Fuel Change

101. 2012-02-22 Dominion Air Quality Modeling Report

102. 2012-03-12 Dominion revised emissions calculations